BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE

Executive Engineeer, Byatarayanapura Division, B.B.M.P., Bangalore - 92

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BILL OF QUANTIES (BOQ) for Package-1, includes 2 works of Rs.248.00 lakhs

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
1	15.00	Outdoor PLZ IP Cameras with 20 X optical zoom with controller along with suitable mounting system (PTZ Pan Tilt and Zoom feature is availbale in this camera can be contolled by the software for pan Tilt and zoom feature at the contol center and can be programmed to view at different angles and zoom level continuosly. It operates at day and night and the viewing distance at clarity is about 100 metres	Nos	78462.00	Rupees Seventy Eight Thousand Four Hundred Sixty Two Only
2	90.00	Bracket (Corner Mount / Pole Mount/ Wall Mount) for mounting the PTZ camera.	Nos	4267.00	Rupees Four Thousand Two Hundred Sixty Seven Only
3	90.00	Outdoor 50 Meter IP Cameras with IR & Mounting Bracket (with IR for day and night vision and can provide a viewing distance of 50 metres)	Nos	21160.00	Rupees Twenty One Thousand One Hundred Sixty Only
4	90.00	Bracket and weatherproof Installation kit for 50 Meter IP Camera	Nos	1545.00	Rupees One Thousand Five Hundred Forty Five Only
5	90.00	Outdoor 30 Meter IP Cameras with IR & Mounting Bracket (with IR for day and night vision and can provide a viewing distance of 30 metres)	Nos	15260.00	Rupees Fifteen Thousand Two Hundred Sixty Only
6	90.00	Bracket and weatherproof Installation kit for 30 Meter IP Camera	Nos	1491.00	Rupees One Thousand Four Hundred Ninety One Only
7	15.00	32 Channel NVR DS 7732 NI- E4 (with 4 Sata Option) the control box and the recording device to connect upto 32 devices, can be cascaded to provide additional cameras	Nos	66982.00	Rupees Sixty Six Thousand Nine Hundred Eighty Two Only
8	15.00	12 TB NAS Box for Back up (NET GEAR) provides storage for the recorded data for quick view back and storage	Nos	257420.00	Rupees Two Hundred Fifty Seven Thousand Four Hundred Twenty Only
9	30.00	4 TB SATA for storage and fitted in the NVR Device for storage	Nos	22850.00	Rupees Twenty Two Thousand Eight Hundred Fifty Only
10	180.00	A suitable sheet metal control panel to house site Equipments (Weather Proof) The power supply and the ethernet connectivity adaptor is stored in this box.	Nos	1526.00	Rupees One Thousand Five Hundred Twenty Six Only
11	180.00	Power supply for the camera. Approved Data Rate	Nos	461.00	Rupees Four Hundred Sixty One Only
12	180.00	Ethernet Switch for connectivity to Internet and Camera Approved Data Rate	Nos	950.00	Rupees Nine Hundred Fifty Only
13	135.00	Supply & Laying of Network and Power Cables from Camera to the control Box. Approved Data Rate	Nos	389.00	Rupees Three Hundred Eighty Nine Only

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14	**90.00**	Video Manager Application Software for Display and Management of Camera on Video Display. Approved Data Rate	Nos	20000.00	Rupees Twenty Thousand Only
15	**90.00**	Installation, Erection & commissioning charges Approved Data Rate	Nos	5060.00	Rupees Five Thousand Sixty Only
16	**195.00**	Modern Dust Bins (Data rate)	Nos	18025.00	Rupees Eighteen Thousand Twenty Five Only
17	**101.25**	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 **Page No. 5 / Item No. 2.3 of PWD SR 2016-17**	Cum	204.12	Rupees Two Hundred Four and Twelve Paise Only
18	**29.70**	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.3 of PWD SR 2016-17**	Cum	5256.36	Rupees Five Thousand Two Hundred Fifty Six and Thirty Six Paise Only
19	**49.68**	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6, stone** hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.6, PWD SR 2016-17**	Cum	4521.96	Rupees Four Thousand Five Hundred Twenty One and Ninety Six Paise Only
20	**21.87**	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.9, PWD SR 2016-17**	Cum	5405.40	Rupees Five Thousand Four Hundred Five and Forty Paise Only
21	**136.80**	KSRB 15.1.3 Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications **Page No. 113 / Item No. 15.3, PWD SR 2016-17**	Sqm	105.84	Rupees One Hundred Five and Eighty Four Paise Only
22	**10.13**	KSRB 2-4 : **Refilling available earth** around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. **Page No. 5 / Item No. 2.11 of PWD SR 2016-17**	Cum	82.08	Rupees Eighty Two and Eight Paise Only
23	**286.20**	KSRB 4-6.1 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 **Page No. 15 / Item No. 4.28, PWD SR 2016-17**	Sqm	249.48	Rupees Two Hundred Forty Nine and Forty Eight Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
24	**79.79**	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **No. 13 / Item No. 4.11 / PWD SR 2016-17**	Cum	6491.88	Rupees Six Thousand Four Hundred Ninety One and Eighty Eight Paise Only
25	**9.57**	KSRB 4.9.2: Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **TMT Bars FE 500 Page No. 17 / Item No. 4.46.2 / PWD SR 2016-17**	Tonne	65455.56	Rupees Sixty Five Thousand Four Hundred Fifty Five and Fifty Six Paise Only
26	**117.90**	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and **removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm** including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.18 / PWD SR 2016-17**	Sqm	331.78	Rupees Three Hundred Thirty One and Seventy Eight Paise Only
27	**280.80**	KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **Page No. 25 / Item No. 5.26.2, PWD SR 2016-17**	Sqm	979.56	Rupees Nine Hundred Seventy Nine and Fifty Six Paise Only
28	**108.00**	KSRB 10-3 : Providing and laying integral cement based waterproofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc., consisting of following application. (a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary water proofing compound conforming to IS:2645 over the RCC slab after cleaning the surface before treatment. (b) Laying cement concrete using broken brick bats 25mm to 100mm size with 50% of cement mortar 1:5 admixed with proprietary water proofing compound conforming IS:2645 over 20mm thick layer of cement mortar 1:5 admixed with proprietary water proofing compound to required slope and treating similarly the adjoining walls upto 300mm height including rounding off junctions of walls and slabs. (c) After two days of proper curing, applying a second coat of cement lurry admixed with proprietary water proofing compound (d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 admixed with proprietary water proofing compound and finally finishing the surface with trowel and neat cement slurry and making of 300x300mm	Sqm	976.32	Rupees Nine Hundred Seventy Six and Thirty Two Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
29	**126.90**	KSRB15-3-13 : Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to **ceiling** including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114, Item No. 15.21 of PWD SR 2016-17**	Sqm	208.44	Rupees Two Hundred Eight and Forty Four Paise Only
30	**100.80**	KSRB15-3.8 : Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114 / Item No. 15.16, PWD SR 2016-17 (Inside Wall)**	Sqm	238.68	Rupees Two Hundred Thirty Eight and Sixty Eight Paise Only
31	**22.77**	KSRB15-7 : Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. **Page No. 115, Item No. 15.33, PWD SR 2016-17**	Sqm	27.00	Rupees Twenty Seven Only
32	**498.00**	KSRB15-3.9 :Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. **Page No. 114 / Item No. 15.17, PWD SR 2016-17 (Outside Wall)**	Sqm	213.84	Rupees Two Hundred Thirteen and Eighty Four Paise Only
33	**25.20**	Supplying and fixing pressed steel door frames size 125x65 mm manufactured from 1.25mm thick carbon steel or imported steel strips with mitred joints of 900 for door openings and shutters made out of seasoned Honne wood, styles of 30 mm, thick with lock rail of 160 mm, width, top and side rails of 100 mm. width and bottom rails of 250 mm width and panel filling with 12mm thick particle board of exterior grade bonded with phenol formal dehide resin and the shutter shall be rot proof, vermin proof, heat resistant guaranteed against shrinkage, warpage and such other defects for a period of 3 years. This shall be as per approved drawings, specification and direction including cost of conveyance, manufacturing, painting with enamel paint 2 coats over primer coat, cost of labour for all items of work, machinery, equipment and all other incidental charges with all lead, lift, loading and unloading etc., complete. The Hollow portion of the frame to be filled with cement concrete 1:2:4. **Page No. 39 / Item No. 7.26, PWD SR 2016-17**	Sqm	3780.00	Rupees Three Thousand Seven Hundred Eighty Only
34	**36.00**	"Supplying and fixing pressed steel window frame of size 100 x 50mm manufactured from 1.25 mm thick carbon steel or imported steel strips with neat mitred joints at 900degree for window openings and shall be suitable to fix M.S. grills as per design and drawings using 12mm dia rods at 100mm Centre to Centre horizontally and two members of M.S flats of 6mmx40mm size at 150mm apart, welded into a frame of 6mmx40mm size M.S. flats with 16mm size lugs, and 8 Nos. of 100mm size hinges, 4 Nos of Butt Stay pins and 4 Nos. Tower bolts and shutters half panelled and hallf glazed with shutters made out of seasoned honne wood, styles of 30mm thick and 100mm width and rails of 30mm thick and 100mm width and using 4mm thick pin headed glass and panel, filling with 12mm thick particle board of exterior grade bonded with phenol formal dehide resin and the shutter shall be rot proof vermin proof, heat resistant guaranteed against shrinkage, warp age and such other defects for a period of 3 years.This shall be as per approved drawing, specification and direction including cost of conveyance, manufacturing painting with 2 coats enamel paint over one coat of primer, cost	Sqm	4104.00	Rupees Four Thousand One Hundred Four Only

	Quantity.	Description	Unit	Rates	
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35	**83.70**	KSRB 14.10-1: Flooring with 25mm to 40mm thick polished **tandur blue stone slabs** using cement mortar 1:6, 25mm thick over existing cement concrete bed or top of roof laid to line and level and jointed with cement slurry mixed with pigment to match the shade of the slab, , including cost of materials, labour, curing, polishing complete as per specifications. Specification No. KBS **Page No. 103 / Item No. 14.15, PWD SR 2016-17**	Sqm	1210.68	Rupees One Thousand Two Hundred Ten and Sixty Eight Paise Only
36	**22.77**	KSRB 15-14.1 : Providing and **applying two coats with oil bound washable distemper** of approved brand and shade on wall surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. **Page No. 117 / Item No. 15.49.1, PWD SR 2016-17**	Sqm	76.68	Rupees Seventy Six and Sixty Eight Paise Only
37	**49.80**	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer. **Page No. 117 / Item No. 15.53.2, SR 2016-17.**	Sqm	90.72	Rupees Ninety and Seventy Two Paise Only
38	**60.00**	KSRB 8.6-7 : Providing and fixing on wall surface 4.0 kg / sq.cm H.D.P.E. rain down water pipes 90 mm outer dia. approved make and brand with necessary specials like shoes, bends and offsets fixed with iron clamps, wall plugs, screws, including cost of materials, labour, complete as per specifications. **Page No. 47 / Item No. 8.18, PWD SR 2016-17**	Mtr	462.24	Rupees Four Hundred Sixty Two and Twenty Four Paise Only
39	**10.00**	Providing and Fixing Leaf Cutter Machine including transportation	Nos	230000.00	Rupees Two Hundred Thirty Thousand Only

Assistant Engineer
Ward no. 07

Assistant Executive Engineer
Kodigehalli sub Division

Executive Engineer
Byatarayanapura Division

Chief Engineer
Yelahanka Zone